Amendment to the Claims

Claims 1-23 (Canceled).

24. (Currently amended) A transgenic mouse whose genome comprises~~comprising a homozygous disruption in an~~ a null endogenous transmembrane tryptase (mTMT) allele, said allele comprising the sequence of SEQ ID NO:1, said null allele comprising exogenous DNA~~mTMT gene, wherein the transgenic mouse exhibits one or more of the following phenotypes: decreased body weight; decreased thymus weight; decreased thymus weight to body weight ratio; and increased pre-pulse inhibition, all relative to wild-type mice~~.

25. (Currently amended) The transgenic mouse of claim ~~24~~40, wherein the decreased body weight is a decrease of about 20% in female transgenic mice, relative to female wild-type mice.

26. (Currently amended) The transgenic mouse of claim ~~24~~40, wherein the decreased body weight is a decrease of about 15% in male transgenic mice, relative to male wild-type mice.

Claim 27 (Canceled).

28. (Currently Amended) A cell or tissue isolated from the transgenic mouse of claim ~~24~~ 35~~or claim 27 wherein said mouse comprises a homozygous disruption in an mTMT gene~~.

29. (Currently Amended) A method of producing a transgenic mouse of claim 24~~comprising a homozygous disruption in an endogenous mTMT gene~~, the method comprising:

(a) providing a mouse embryonic stem cell comprising a disruption in an endogenous mTMT allele; and

(b) introducing the mouse embryonic stem cell into a blastocyst;

(c) introducing the blastocyst into a pseudopregnant mouse, wherein the pseudopregnant mouse generates~~gives birth to~~ a chimeric mouse; ~~and~~

(d) selecting chimeric mice to breed to produce the transgenic mouse; and

~~(d)~~(e) breeding the chimeric mouse to produce the transgenic mouse ~~wherein the transgenic mouse comprises a homozygous disruption in an mTMT gene and wherein said mouse exhibits one or more of the following phenotypes: decreased body weight; decreased thymus weight; decreased thymus weight to body weight ratio; and increased pre-pulse inhibition, all relative to wild-type controls~~.

30. (Currently Amended) A targeting construct comprising:

a. a first polynucleotide sequence homologous to a first region of a transmembrane tryptase ~~an~~ (mTMT)~~mTMT~~ gene;

b. a second polynucleotide sequence homologous to a second region of the mTMT gene; and

c. a gene encoding a selectable marker located between the first polynucleotide sequence and the second polynucleotide sequence,

d. wherein the targeting construct when introduced into a murine embryonic stem cell, will introduce a disruption in an mTMT allele~~can be used to make a transgenic mouse having a disruption in the endogenous mTMT gene, wherein the mouse when homozygous for a disruption in the mTMT gene exhibits one or more of the following phenotypes: decreased body weight; decreased thymus weight; decreased thymus weight to body weight ratio; and increased pre-pulse inhibition as compared to wild-type mice~~.

Claim 31 (Canceled).

32. (Previously presented) A mouse embryonic stem cell transformed with the targeting construct of claim 30.

Claim 33 (Canceled).

34. (New) The transgenic mouse of claim 24 wherein said mouse is heterozygous for said null allele.

35. (New) The transgenic mouse of claim 24 wherein said mouse is homozygous for said null allele.

36. (New) The transgenic mouse of claim 24 wherein said exogenous DNA comprises a gene encoding a selection marker.

37. (New) The transgenic mouse of claim 35 wherein said gene is a neomycin resistant gene.

38. (New) The transgenic mouse of claim 24 wherein said exogenous DNA comprises a gene encoding a visible marker.

39. (New) The transgenic mouse of claim 37 wherein said DNA comprises lacZ.

40. (New) The transgenic mouse of claim 35 wherein said mouse exhibits, relative to a wild-type control mouse, at least one of the following: decreased body weight; decreased thymus weight; decreased thymus weight to body weight ratio; or increased pre-pulse inhibition.